

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/791,793	03/04/2004		Kia Silverbrook	ZG124US	6831	
24011	7590	09/10/2004		EXAMINER		
		ESEARCH PTY L	GORDON, RAQUEL YVETTE			
BALMAIN,	DARLING STREET LMAIN, 2041			ART UNIT	PAPER NUMBER	
AUSTRALI	A			2853		
				DATE MAILED: 09/10/200	DATE MAILED: 09/10/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/791,793	SILVERBROOK, KIA			
Office Action Summary	Examiner	Art Unit			
	Raquel Y. Gordon	2853			
The MAILING DATE of this communication appe Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	i6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
 1) ☐ Responsive to communication(s) filed on 3/4/20 2a) ☐ This action is FINAL. 2b) ☐ This 3) ☐ Since this application is in condition for allowant closed in accordance with the practice under Expression. 	action is non-final. ace except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1-12 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-4 and 7-10 is/are rejected. 7) ☐ Claim(s) 5,6,11 and 12 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) ☐ The specification is objected to by the Examiner 10) ☑ The drawing(s) filed on 04 March 2004 is/are: a Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correcti 11) ☐ The oath or declaration is objected to by the Ex	a)⊠ accepted or b)□ objected to drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/425,418. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) ☑ Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)			
 Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/4/2004. 	Paper No(s)/Mail Da				

Application/Control Number: 10/791,793 Page 2

Art Unit: 2853

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-12 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-3 of prior U.S. Patent No. 6698867 B2. This is a double patenting rejection.

- 1. A printer having at least one inkjet printhead which comprises a substrate; a plurality of nozzles positioned on the substrate, each nozzle comprising a nozzle chamber and an aperture through which ink form the nozzle chamber is ejected; an actuator that is operatively positioned with respect to the nozzle chamber for causing ejection of ink within the nozzle chamber from the aperture; and drive circuitry arranged on the substrate and connected to the actuator to control operation of the actuator; wherein the drive circuitry and the actuator of each nozzle extend over a common portion of the substrate (Claim 1).
- 2. The printer of claim 1 wherein the actuator comprises a thermal actuator

Art Unit: 2853

incorporating a heating circuit, and wherein the drive circuitry is adapted to provide an electrical current to said heating circuit (Claim 3/2).

- 3. The printer of claim 2 wherein the thermal actuator includes a paddle disposed within the nozzle chamber and being connected to a lever arm for pivotal movement of the paddle within the nozzle chamber (Claim 3/2).
- 4. The printer of claim 1 wherein the substrate is a silicon wafer (Claim 1).
- 7. An inkjet printhead which comprises a substrate; a plurality of nozzles positioned on the substrate, each nozzle comprising a nozzle chamber and an aperture through which ink form the nozzle chamber is ejected; an actuator that is operatively positioned with respect to the nozzle chamber for causing ejection of ink within the nozzle chamber from the aperture; and drive circuitry arranged on the substrate and connected to the actuator to control operation of the actuator; wherein the drive circuitry and the actuator of each nozzle extend over a common portion of the substrate (Claim 1).
- 8. The printhead of claim 7 wherein the actuator comprises a thermal actuator incorporating a heating circuit, and wherein the drive circuitry is adapted to provide an electrical current to said heating circuit (Claim 3/2).
- 9. The printhead of claim 8 wherein the thermal actuator includes a paddle disposed

Art Unit: 2853

within the nozzle chamber and being connected to a lever arm for pivotal movement of the paddle within the nozzle chamber (Claim 3/2).

10. The printhead of claim 7 wherein the substrate is a silicon wafer (Claim 1).

Allowable Subject Matter

Claims 5, 6, 11, and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Indication of Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter: The following claimed combination is not taught by the prior art:

- 5. The printer of claim 1 wherein the actuator is at least partially external to the nozzle chamber.
- 6. The printer of claim 1 wherein the drive circuitry and the actuator overlap in plan view.
- 11. The printhead of claim 7 wherein the actuator is at least partially external to the nozzle chamber.

Application/Control Number: 10/791,793 Page 5

Art Unit: 2853

12. The printhead of claim 7 wherein the drive circuitry and the actuator overlap in plan view.

Contact Information

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Raquel Y. Gordon, whose telephone number is (703) 308-0022. The Examiner can normally be reached on M Tu Th and F 8:30-6:00. Effective February 11, 2003, Ex. Gordon, can be reached at the new PTO facility at (571) 272-2145.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen Meier can be reached on 703-308-4896. Effective February 11, 2003, the supervisor can be reached at the new PTO facility at (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3432. A new fax number will be forthcoming.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956. A new status inquiry number will be forthcoming.

Raque/Y. Gordon Primary Examiner Art Unit 2853 September 4, 2004